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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,527	11/01/2000	Matthew R. Arnold	13734(YOR920000357US1	1908
7590	05/27/2005			EXAMINER
Richard L Catania Scully Scott Murphy & Presser 400 Garden City Plaza Garden City, NY 11530			ZHEN, WEI Y	
			ART UNIT	PAPER NUMBER
			2191	

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/703,527	ARNOLD ET AL.
Examiner	Art Unit	
Wei Y. Zhen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 19 January 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

1. This office action is in response to amendment filed 1/19/2005.
2. The rejections set forth in the previous office action to claims 1-13, 15-22, 24-36 still applied (although claims 1, 25 have been amended, the amendments to these claims do not change the scope of the claims, the same ground of rejections set forth in the previous office actions still applied. See the previous office action mailed on 10/19/2004 for the rejections to these claims).

Applicant's arguments see p. 13 of the remark, filed 1/19/2005, with respect to claims 14 and 23 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art, U.S. Patent No. 6,327,699 (Larus et al).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-8, 12, 25 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Burrows US Patent No. 5,710,724.

See the previous office actions 10/19/2004 for the rejections to these claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3-5, 9-11, 13, 15-19 and 21-2A 24, 26-29, 31-33 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Blandy, US Patent No. 6,249,912.

See the previous office actions 10/19/2004 for the rejections to these claims.

5. Claims 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of U.S. Patent No. 6,327,699 (Larus et al).

As Per Claim 14, the rejection of claim 1 is incorporated and further Burrows discloses yield points are inserted in one or more program locations (see rejection to claim 1).

Burrows does not disclose programs locations including a method prologue and a loop back edge.

However, Larus et al discloses teaches a method prologue and a loop back edge (Fig. 2 and col. 5 line 58 to col. 6 line 37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Larus into the system of Burrows to use method prologue and back edge yield points. The modification would have been obvious because

one of ordinary skill in the art would have been motivated to take profile data samples at various program locations to obtain a more accurate and complete profile data.

As per Claim 23, the rejection of claim 15 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 14.

6. Claims 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows in view of Blandy, further in view of Holzle al., US Patent No. 5,995,754.

See the previous office actions 10/19/2004 for the rejections to these claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-13, 15-22, 24-36 filed 1/19/2005 have been fully considered but they are not persuasive.

Applicant's argument:

1) In the Burrows technique, the uninstrumented copy of the program contains no instrumentation and thus cannot be used for system profiling; the instrumented copy contains instrumentation, but it is unconditional instrumentation i.e., it is executed every time when the instrumented program is executing; and there is no compiler-inserted code that determines when a sample should be taken. that is, the second instrumented version of the program in Barrows is always profiling and consequently, incurs much higher processing overhead as compared to the present invention where sampled operations performed at yield points occur at a subset of the executions of yield points.

Examiner's response:

1) Burrows clearly discloses sampled operations performed at yield points occur at a subset of the executions of yield points (Fig. 2, col. 3 line 33 to col. 4 line 65, especially at col. 4 lines 27-35, “dynamic enablement are disablement of instrumentation...”).

Applicant’s argument:

2) Burrows requires Operating system support in the form of a page table mapper.

The present invention does not necessarily require the O/S kernel support thus further conserving processing resources while profiling.

Examiner’s response:

2) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. does not necessarily require the O/S kernel support thus further conserving processing resources while profiling) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant’s argument:

3) Burrows does not teach the unconditional execution of yield points and conditional actions performed at executed yield point instances.

Examiner’s response:

3) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.

unconditional execution of yield points and conditional actions performed at executed yield point instances) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's argument:

4) Blandy does not make up the deficiencies of Burrows with respect to processing of yield points.

Examiner's response:

4) Blandy is cited only for identifying a method currently executing in said program, said method including tracking frequencies of methods executed in said program for characterizing said program behavior.

Applicant's argument:

5) Claims 20 and 34 describe decrementing and checking a counter as a sampling mechanism to determine when it is time to observe the state of environment, which is different from Holzle's technique. A further difference is that Holzle specifies that one counter is use per method (or procedure) in the program, whereas the present invention does not have this restriction, and can use a single counter for the entire program.

Examiner's response:

5) Holzle discloses checking a counter as a sampling mechanism to determine when it is time to observe the state of the environment. Whether incrementing the counter or

decrementing the counter is only an obvious type of implementation one having ordinary skill in the art can choose to implement. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. use a single counter for the entire program) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei Y. Zhen whose telephone number is (571) 272-3708. The examiner can normally be reached on Monday-Friday, 8 a.m. - 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Wei Zhen
5/26/2005

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WEI Y. ZHEN
PRIMARY EXAMINER